REMARKS

The Applicant has now had an opportunity to carefully consider the comments set forth in the Office Action of June 12, 2007. The acknowledgement of allowable subject matter in claim 8 is noted with appreciation. Nevertheless, all the claim rejections are respectfully traversed. Reexamination and reconsideration of the Application in view of the following remarks and those submitted in Applicant's Amendment J, which was mailed March 19, 2007, are requested.

The Office Action

In the Office Action that was mailed June 12, 2007:

claim 8 was identified as including allowable subject matter;

a response to some of the arguments presented in Applicant's Amendment J, which was mailed March 19, 2007, was provided;

claims 2, **4**, **5**, **7**, **10-13**, **18** and **20-28** were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,963,205 to Sotomayor ("Sotomayor") in view of U.S. Patent No. 5,666,490 to Gillings, et al. ("Gillings");

claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of three references including Sotomayor, Gillings and U.S. Patent No. 5,276,616 to Kuga, et al. ("Kuga");

claims 15 and **16** were rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of three references including Sotomayor, Gillings and U.S. Patent No. 4,903,229 to Schmidt, et al. ("Schmidt"); and

claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over a combination of four references including Sotomayor, Gillings, Schmidt and U.S. Patent No. 6,064,397 to Herregods, et al. ("Herregods").

The Present Application

By way of brief review, the present application is directed to systems and methods for automatic and semi-automatic document indexing of scanned documents. For instance, the invention is useful where a large document is scanned to generate an electronic version of the document. For example, a review of the document may

indicate that chapter headings in the document are rendered in an 18-point font size at a location that is centered horizontally on a page and is two inches from the top of the page. In that case, **a first subsection delimiter** may be defined as any text located two inches from the top of a page and rendered in 18-point font size. Subheadings in the exemplary document might occur anywhere on a page but are rendered in a 16-point font size with underlined characters. Therefore, **a second subsection delimiter** for the document might be defined as underlined 16-point text.

Once one or more subsection delimiters are defined (e.g., by a document processor user), the electronic version of <u>the document is searched to find occurrences of text **corresponding to** the subsection delimiters</u>. Information regarding each occurrence is used to create an index or table of contents for the document.

In stark contrast, the primary reference of the Office Action to <u>Sotomayor is unrelated to providing an index for a document that has to be scanned in order to create an electronic version. Instead, Sotomayor discusses aspects of a word processor</u> and the **much simpler problem** of automatically identifying key topics and phrases in the text of a document that is being created in the word processor program. Sotomayor discusses inserting identifying tokens into the text for an index generation program in the word processor to generate an index to those key topics.

Gillings allegedly discusses an electronic document management system that converts documents into electronic images which can be sequentially routed to individual users in a network system. The network system includes **at least two work nodes** for processing the documents where **one of the nodes is a data entry work node**. At the data entry work node, data contained in the document is entered into a database. <u>As the data is entered into the database, it is dynamically linked with its corresponding image</u> (Abstract). Gillings includes the word --indexing-- (e.g., column 10, line 20 - column 11, line 29). However, <u>the indexing process of Gillings involves the manual keying of information by a worker at a entry node</u>. Accordingly, the combination of Sotomayor with the manual transcription system of Gillings does not arrive at the method for automatic index generation of the present application.

Additional details with regard to Sotomayor and Gillings can be found in Applicant's Amendment J. Kuga, Schmidt and Herregods have been addressed in

previous papers submitted by the Applicant including, for example, Applicant's Amendment D, which was mailed by the Applicant on August 6, 2004. Accordingly, reexamination and reconsideration are respectfully requested.

Reply to Response to Arguments

It is respectfully submitted that the Response to Arguments section of the present Office Action highlights **clear errors** of the Office Actions.

For example, beginning toward the bottom of page 6, the Office Action addresses the Applicant's assertion that the previous Office Action does not assert that Sotomayor and/or Gillings disclose determining a subsection delimiter wherein determining the subsection delimiter comprises a user placing a predetermined machine-readable symbol representing a demarcation point on a printed version of the document. The Office Action addresses that argument by making the assertion now, in the Final Office Action, and does not argue that the position of the Office was explained in the previous Office Action. Accordingly, it is respectfully submitted that the position of the Office was not clear in the previous Office Action. Therefore, no clear issue on this point had been developed (see MPEP 706.07), and the finality of the present Office Action is premature. Accordingly, **withdrawal of the finality** of the present Office Action **is respectfully requested**.

With regard to the substance of the position of the Office regarding the subject claim element, it is respectfully submitted that the position of the Office is based on impermissible hindsight reasoning. Sotomayor discusses methods for generating an index for an electronic document while the electronic document is being created or as part of the electronic document creation process and takes full advantage of all the information available about the electronic document including information that can be provided by the document's author during the electronic document authoring process. Sotomayor does not disclose, suggest or contemplate anything about generating an index for a document that is only available in paper or printed from. Accordingly, any interpretation of Sotomayor as suggesting a user placing a predetermined machine-readable symbol representing a demarcation point on a printed version of a document

can only have been motivated from information gleaned from the present application and is, therefore, based on impermissible hindsight reasoning.

Gillings discusses scanning documents. However, the resulting electronic images are simply stored in combination with information that is manually entered by data entry personnel (see FIGS. 6-10) and Gillings does not disclose or suggest a user placing a predetermined machine-readable symbol representing a demarcation point on a printed version of a document as a subsection delimiter. It is respectfully submitted that any reading of Sotomayor, which is silent with regard to printed documents, as disclosing or suggesting placing a predetermined machine-readable symbol representing a demarcation point on a printed version of the documents of Gillings is based on information that could only have been gleaned from the present application and is, therefore, based on <u>impermissible hindsight reasoning</u>.

Accordingly, it is respectfully submitted that the subject portion of the Response to Arguments section of the present application highlights **clear errors** of the Office Action and reexamination and reconsideration are requested.

With regard to the assertion of the Applicant that Sotomayor and Gillings do not disclose or suggest selecting an exemplary subsection title, performing document recognition or optical character recognition on the selected exemplary subsection title to determine at least one recognized property, and using the at least one recognized property of the exemplary subsection title as a subsection delimiter definition, the first full paragraph of page 7 of the Office Action highlights a number of **clear errors** of the Office Actions.

First, the Office Action draws an analogy between selecting an HTML heading level for portions of a document and selecting an exemplary subsection title. However, Sotomayor discloses identifying heading levels so that different display devices having different capabilities can identify an author's intent with regard to differentiating between portions of a document and provide some semblance of that differentiation by some means within the capability of the display device. Accordingly, Sotomayor intends that all headings receive some heading level identification. Therefore, Sotomayor does not disclose or suggest <u>selecting a title as an example title</u> for the purpose of

communicating to an automatic indexing system the characteristics of other subsection titles that should be searched for during the preparation of a table of contents or index.

Additionally, the Office Action stipulates that Sotomayor does not specifically disclose optically recognizing characteristics of the alleged exemplary subsection titles and relies on Gillings for this disclosure. However, the Office Action does not identify a portion of Gillings that discloses or suggests optically recognizing characteristics of an exemplary subsection title. Moreover, it is respectfully submitted that Gillings does not disclose or suggest optically recognizing any aspect of any document. Gillings discusses scanning a document in order to generate an electronic image of that document that can be stored and later retrieved <u>based on manually entered indexing information</u>. It is respectfully submitted that Gillings does not disclose or suggest analyzing an image or optically recognizing characters or any other aspect of those documents. In any event, as indicated above, the Office Action does not identify a portion of Gillings that makes such a disclosure.

Accordingly, the subject portion of the Response to Arguments section of the present Office Action highlights **clear errors** of the Office Actions.

With regard to the statement of the Applicant that the disclosure of summary page generator using tokens to generate a summary does not disclose or suggest that a user designated the tokens for use in generating the summary, the Response to Arguments section again highlights **clear errors** in both logic and in fact. For example, the Office Action asserts that Sotomayor discloses that the author specifies "that tokens." However, that Sotomayor discloses that an author specifies tokens is not in dispute. However, Sotomayor discloses that <u>the tokens are used to designate up to six levels of heading information so the applications (e.g., web browsers) on different computers can then process the HTML documents for visual presentation in a manner</u> **<u>customized for particular display devices</u>** (column 6, lines 7-12) and not for use in generating a summary. Even if a summary generator of Sotomayor uses the heading tokens in generating a summary, that does not disclose or suggest a system wherein a user designated the tokens **for use in generating the summary**. Accordingly, the system of Sotomayor may include unwanted portions of the document in the summary

simply because they are associated with the heading token for the purpose of customized display on various devices.

Additionally, the Office Action appears to mischaracterize "user defined index fields" that are discussed by Gillings. The referred to index fields are for data entry operators to manually fill in, preferably through double entry keying, document index information (column 10, lines 35-39). An index process screen similar to the one shown in FIG. 6 of Gillings is displayed. The indexer (i.e., a keypunch operator) enters index values in each of the index fields. For some fields, the number of valid entries may be limited. In such cases, pull-down lists containing the legal values for the field may be used. The use of pull-down fields helps ensure the quality of the indexing process. After selecting, entering and confirming index values for the current image, the operator may then save the index fields (column 10, lines 40-55). The Response to Arguments section of the Office Action implies that these index fields are somehow analogous to the tokens of Sotomayor and/or the delimiter definition of the present application. However, as can be seen from the cited portion of column 10, the subject fields are simply for the manual entry regarding a displayed image of a document page and are completely unrelated to the heading style tokens of Sotomayor or the delimiter designations of the present application. Indeed, the subject matter of the present application seeks to eliminate the need for the manual data entry of Gillings.

Accordingly, the subject portion of the response to arguments highlights **clear errors** of the Office Actions in both logic and fact.

Beginning at the bottom of page 7 and continuing through the top portion of page 8, the Response to Arguments section of the present Office Action addresses a fragment of an argument that begins at the bottom of page 17 and continues to the top of portion of page 18 of Applicant's Amendment J. The complete argument addresses the fact that the Office Action stipulates that Sotomayor fails to disclose a document divider that is operative to divide the document into subsections (e.g., see page 3 of the present Office Action wherein the stipulation is repeated), which is an apparent reference to an element of **claim 10**, and the Office Action's apparent reliance on Gillings for this disclosure. The Applicant's argument is that the Office Action stipulates that Sotomayor does not disclose this element and that Gillings does not disclose it

either. Instead of addressing that point, the present Office Action asserts that Sotomayor discloses searching for headings and a token specified by a user. Even if those assertions were correct, they have no bearing on whether or not Gillings discloses a document divider operative to divide the document into subsections based on the recorded information regarding the occurrences corresponding to the delimiter definition as is recited in **claim 10** of the present application and for which the Office Action relies on Gillings.

It is noted that the Response to Arguments section also asserts that "on the other hand Gillings teaches a user-specified indexing, which teaches the silent limitation of Sotomayor." What this sentence was intended to convey is not entirely clear. However, it appears that the Office Action is once again referring to the indexing fields depicted, for example, in FIG. 6 of Gillings. As indicated above, these fields are not analogous to either the tokens of Sotomayor or the delimiter definition of the present application. Instead, the indexing fields of Gillings represent manually entered information provided by data or keypunch operators based on a visual inspection of a displayed image of a scanned document and <u>which make up the index themselves</u> and <u>are not delimiters</u> which are searched for in the scanned document. Accordingly, this aspect of Gillings is not fairly combined with the token aspect of Sotomayor and making such a combination does not arrive at the subject matter of, for example, **claim 10** of the present application.

For at least the foregoing reasons, the subject portion of the Response to Arguments section of the present application highlights **<u>clear errors</u>** of the Office Action.

In an apparent reference to arguments made in support of **claim 18**, the last paragraph of the Response to Arguments section of the present Office Action addresses an argument made by the Applicant that Sotomayor does not disclose or suggest a document processor operator indicating that tokens should be used as a subsection delimiter. It is noted that the Office Action does not take issue with this assertion. Instead, the Office Action asserts that "Gillings discloses user-defined index fields, which requires the input from a user, who is the operator." However, as indicated above, the user-defined index fields of Gillings are not in any way analogous to the

tokens of Sotomayor or the subsection delimiters recited in the claims of the present application. Instead, they are for the manual entry of index information. Accordingly, the assertions of the Office Action with regard to the user-defined index fields of Gillings are immaterial. Disclosure of the heading tokens of Sotomayor does not disclose or suggest a <u>document processor operator indicating that tokens should be used as subsection delimiters</u>. Instead, the disclosure around the heading tokens of Sotomayor allows different computers to process the HTML documents for visual presentation in a manner customized for particular display devices. An application on one computer could display a level one heading as a 14-point bold bodini, while an application on another computer could display as a 20-point italic roman (column 6, lines 9-15).

For at least the foregoing additional reasons, the Response to Arguments section of the present Office Action highlights **clear errors** of the Office Action.

Additionally, the Office Action fails to address a number of other arguments presented in Applicant's Amendment J. For example, the Office Action does not address the argument that Sotomayor and Gillings do not disclose or suggest performing recognition functions on scanned document data to generate a recognized version of a document (e.g., see the bottom of page 15 - the top of page 16).

Furthermore, the Office Action does not address the assertion that **the Office has not met its burden of presenting a _prima facie_ case of obviousness** found toward the top of page 16 of Applicant's Amendment J.

Further in this regard, it is noted the Office Action relies on Gillings for disclosure of performing document recognition or optical character recognition on scanned documents and does not address the argument found at the middle of page 16 of Applicant's Amendment J that <u>Gillings does not disclose or suggest performing a document recognition or optical character recognition</u> of scanned documents.

With regard to arguments found on page 18, with regard to **claim 18**, the present Office Action does not respond to the arguments pointing out that Gillings does not disclose or suggest performing recognition functions on the scanned document data to generate a recognized version of the document data to generate a recognized version of the document and that, **accordingly, the Office has not met its burden of presenting a _prima facie_ case of obviousness**.

The Office Action does not respond to the assertion that the Office did not meet its burden of presenting a *prima facie* case of obviousness with regard to **claim 20** because the Office Action did not even assert that Sotomayor and/or Gillings disclose performing recognition functions on scanned document data or defining a subsection delimiter, wherein defining the subsection delimiter comprises <u>marking a paper version of the document</u> with at least one predetermined machine-readable demarcation symbol prior to scanning the document. Even if the present Office Action makes those assertions, that does address the fact that the previous Office Action did not make them and, therefore, did not meet its burden. Accordingly, the present Office Action should not be made final and withdrawal of the finality of the present Office Action is respectfully requested.

With regard to **claim 22**, the Office Action does not respond to the arguments found at the top of page 20 of Applicant's Amendment J that the Office Action does not even assert that Sotomayor and Gillings disclose or suggest determining a subsection delimiter comprises a user indicating at least one of a font size and a font style.

With regard to **claim 23**, the Office Action does not respond to the argument that the Office Action does not even assert that Sotomayor and Gillings disclose or suggest determining a subsection delimiter comprises a user indicating at least one of a font size, a font style and a specific point coordinate within the document and, therefore, does not meet its burden of presenting a *prima facie* case of obviousness.

With regard to **claim 28**, the Office Action does not respond to the arguments found on page 21 of Applicant's Amendment J that the Office Action does not even assert that Sotomayor and Gillings disclose the identified elements of **claim 28** including, for example, performing recognition functions on scanned document data to generate a recognized version of the document and defining a subsection delimiter wherein defining the subsection delimiter comprises at least one of a user building a subsection delimiter from a list of predetermined potential subsection delimiter components, performing statistical analysis on recognized characters to select characteristics that are most likely to be associated with the subsection delimiters, a user entering a subsection delimiter by selecting symbols on a display portion of the electronic version of the document and designating at least one demarcation point on at

least one displayed portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions. Additionally, the present Office Action did not respond to the argument that since the Office Action does not even assert that Sotomayor and Gillings disclose these elements of **claim 28**, **the Office has not met its burden of presenting a *prima facie* case of obviousness** with regard to **claim 28**.

It is respectfully submitted that the lack of responsiveness of the Office Action to these arguments highlights <u>**clear errors**</u> of the Office Actions and reexamination and reconsideration are respectfully requested.

<u>The Claims are not Obvious</u>

Claims 2, **4**, **5**, **7**, **10-13**, **18** and **20-28** were rejected under 35 U.S.C. §103(a) as being unpatentable over Sotomayor in view of Gillings.

In explaining these rejections, the Office Action makes certain assertions about what Sotomayor and Gillings disclose. However, the Office Action does not link any of these assertions to elements of the claims, and it is respectfully submitted that Sotomayor and Gillings to not disclose or suggest all of the elements of the claims arranged as required by the claims. Accordingly, the claims are not obvious in light of Sotomayor and Gillings.

For example, **claim 2** recites *inter alia*: determining a subsection delimiter definition including at least one delimiter characteristic, wherein determining a subsection delimiter comprises a user indicating at least one of a <u>font size</u>, <u>a font style</u>, <u>a text string</u>, <u>a text location description</u>, and <u>a specific point coordinate</u> within the document or wherein determining a subsection delimiter comprises <u>a user placing a predetermined machine-readable symbol representing a demarcation point on a printed version of the document</u> as the subsection delimiter.

In this regard, it is noted that the Office Action does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises <u>a user indicating a font size</u>.

The Office Action does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises <u>a user indicating a font style</u>.

The Office Action does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises a user indicating a text string.

The Office Action does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises a user indicating a text location description.

The Office Action does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises a user indicating a specific point coordinate within the document.

The explanation of the rejection of **claim 2** does not even assert that Sotomayer and/or Gillings discloses determining a subsection delimiter wherein determining the subsection delimiter comprises a user placing a predetermined machine-readable symbol representing a demarcation point on **a printed version** of the document as the subsection delimiter. Additionally, it is respectfully submitted that neither Sotomayor nor Gillings discloses a user placing a machine-readable symbol on a printed version of a document. Therefore, the combination of Sotomayor and Gillings cannot disclose or suggest placing a predetermined machine-readable symbol representing a demarcatin point on a printed version of a document as a subsection delimiter.

For at least the foregoing reasons, the Office has not met its burden presenting a *prima facie* case of obviousness, and **claim 2**, as well as **claims 4-6**, which depend therefrom, is not anticipated and is not obvious in light of Sotomayer and Gillings.

Further in regard to the assertions of the Office Action with regard to the disclosure of Sotomayer, it is noted that the Office Action asserts that six different tokens allegedly disclosed by Sotomayer as bracketing heading information are considered by the Office as subsection delimiters and are predetermined machine-readable symbols. However, it is noted that independent **claims 2, 7, 10, 18, 20, 22, 23** and **28** do not refer to predetermined machine-readable symbols, except that **claims 20** and **22** refer to predetermined machine-readable symbols which are placed on a printed or paper version of a document. In this regard, it is respectfully submitted that even if the six tokens referred to in the Office Action were fairly construed to be predetermined machine-readable symbols as the term is used in the present application, it is

respectfully submitted that Sotomayer, even in view of Gillings, does not disclose or suggest a user placing such tokens <u>on printed or paper versions</u> of a document.

For at least the foregoing additional reasons, independent **claims 2**, **7**, **10**, **18**, **20**, **22**, **23** and **28**, as well as **claims 4-6** and **21**, which depend from **claim 2**; **claim 8**, which depends from **claim 7**; **claims 11-13**, **15-17** and **26-27**, which depend from **claim 10**; **claim 24**, which depends from **claim 22**; and **claim 25**, which depends from **claim 23**, are not anticipated and are not obvious in light of Sotomayer and Gillings.

Claim 7 recites *inter alia*: determining a subsection delimiter definition including at least one delimiter characteristic, wherein determining a subsection delimiter definition comprises selecting an exemplary subsection title, performing one of document recognition and optical character recognition on the selected exemplary subsection title to determine at least one recognized property, and using the at least one recognized property of the exemplary subsection title as a subsection delimiter definition.

The Office Action stipulates that Sotomayer fails to teach scanning a document to generate scanned document data and performing recognition functions on the scanned document data to generate a recognized version of the document. Furthermore, it is respectfully submitted that Gillings does not disclose or suggest performing recognition functions on a scanned document data to generate a recognized version of the document. Moreover, Sotomayer and Gillings do not disclose or suggest selecting an exemplary subsection title, performing document recognition or optical character recognition on the selected exemplary subsection title to determine at least one recognized property, and using the at least one recognized property of the exemplary subsection title as a subsection delimiter definition. Further in this regard, it is noted that the Office Action does not assert that Sotomayer or Gillings disclose or suggest at least this aspect of **claim 7**.

Accordingly, the Office Action has not met its burden of presenting a *prima facie* case of obviousness and **claim 7**, as well as **claim 8**, which depends therefrom is not anticipated and is not obvious in light of Sotomayer and Gillings.

Furthermore, it is respectfully submitted that Gillings does not disclose or suggest performing document recognition or optical character recognition on scanned

documents. Instead, it is respectfully submitted that the scanned documents of Gillings are displayed (FIG. 3, document window 24) for review by various people, including, for example, first and second index operators (e.g., column 11, lines 20-21), an edit operator (column 11, line 57), a data entry A and data entry B operator (column 12, lines 35-40) and a comment entry operator (column 13, lines 36-37).

For at least the foregoing additional reasons, **claim 7**, as well as **claim 8**, which depends therefrom, is not anticipated and is not obvious in light of Sotomayer and Gillings.

The recognition of the Office Action that **claim 8** includes allowable subject matter is noted with appreciation.

Claim 10 recites a document processor operative to automatically generate an index for a document from a occurrences corresponding to a delimiter definition, the document processor comprising *inter alia*: a delimiter designator module operative to communicate with the document processor operator through the user interface in order to generate at least one delimiter designation for the delimiter definition, a delimiter searcher operative to search for and record text and text location information regarding the occurrences corresponding to the delimiter definition within the electronic version of the document and a document divider operative to divide the document into subsections based on the recorded information regarding the occurrences corresponding to the delimiter definition.

The Office Action asserts that the tokens of Sotomayer are considered as subsection delimiters. However, the tokens of Sotomayer allows an author to specify up to six levels of heading information bracketed by six different hitting token pairs. Applications on different computers then process the HTML documents for visual presentation in a manner customized for particular display devices. An application on one computer could display a level 1 heading as a 14-point bold Bodini, while an application on another computer could display it as a 20-point italic Roman (column 6, lines 7-15). It is respectfully submitted that the author inserts these tokens as part of the document at document creation time. It is noted that the Office Action does not assert that a user may then designate which, if any, of the heading tokens are to be used in generating an index or table of contents. Instead, it is respectfully submitted

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that the cited portion of column 10 (lines 2-6) is part of an explanation that a table of contents summary page comprises a table of contents (generated from the heading tokens inserted in the source document by its author) automatically derived by a summary page generator. However, it is respectfully submitted that <u>disclosure that the summary page generator uses the tokens to generate the summary does not disclose or suggest that a user designated the tokens **for use in generating the summary**</u>.

Accordingly, the Office Action has not met its burden for identifying disclosure in the cited references of a delimiter designator module operative to communicate with the document processor operator through the user interface in order to generate at least one delimiter designation for the delimiter definition. The cited portions indicate that an author includes tokens to allow a document to be customized for display on particular devices (column 6, lines 7-15) and that a summary generator takes advantage of these tokens to generate a table of contents summary page. However, <u>the cited portions do not disclose or suggest that a document processor operator designates the tokens **for use as delimiter definitions**</u>.

Additionally, the Office Action stipulates that Sotomayer fails to disclose a document divider operative to divide the document into subsections and relies on Gillings for this disclosure. However, while the documents of Gillings are allegedly subdivided into two or more subdivisions which are classified by subdivision type (Abstract), it is respectfully submitted that Gillings does not disclose or suggest that such divisions are the result of a document divider that is operative to divide the document into subsections <u>based on recorded information regarding occurrences corresponding to a delimiter definition wherein the recorded information is provided by a delimiter searcher that is operative to search for and record text and text location information regarding occurrences corresponding to a delimiter definition as recited in **claim 10**</u>. Instead, it is respectfully submitted that <u>the documents of Gillings are divided into subdivisions according to a manual indexing process</u> wherein one and sometimes two index operators view an image of a document (document window 24 of FIG. 3) and key in information into predesignated fields (column 10, line 21 - column 11, line 28) for every page in the document.

For at least the foregoing additional reasons, **claim 10**, as well as **claims 11-13**,

15-17, **26** and **27**, are not anticipated and are not obvious in light of Sotomayer and Gillings.

Claim 18 recites *inter alia*: performing recognition functions on the scanned document data to generate a recognized version of the document. The Office Action stipulates that Sotomayer fails to disclose performing recognition functions on scanned document data to generate a recognized version of the document and appears to rely on Gillings for this disclosure. However, the Office Action does not assert that Gillings discloses or suggests performing recognition functions on the scanned document data to generate a recognized version of the document. Additionally, it is respectfully submitted that Gillings does not disclose or suggest performing recognition functions on scanned document data to generate a recognized version of the document.

For at least the foregoing reasons, the Office has not met its burden of presenting a *prima facie* case of obviousness, and **claim 18** is not obvious in light of Sotomayer and Gillings.

Moreover, it is respectfully submitted that Gillings does not remedy the deficiency of Sotomayer. Gillings does not disclose or suggest performing recognition functions on scanned image data.

Additionally, **claim 18** recites *inter alia*: defining a subsection delimiter, wherein defining the subsection delimiter includes at least one of a document processor operator building a subsection delimiter definition from a list of predetermined potential subsection delimiter components, a document processor operator entering a subsection delimiter through keyboard keystrokes, entering a subsection delimiter by selecting symbols on a display portion of an electronic version of the document, and designating at least one demarcation point on at least on display portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions.

It is respectfully submitted that the Office Action does not even assert that Sotomayer and Gillings disclose or suggest any of these listed methods for defining a subsection delimiter. <u>The inclusion of tokens described by Sotomayer is part of a document authoring process and does not disclose or suggest a document processor operator indicating that the tokens should be used as subsection delimiters</u>.

For at least the foregoing additional reasons, the Office has not met its burden of

presenting a *prima facie* case of obviousness, and **claim 18** is not anticipated and is not obvious in view of Sotomayer and Gillings.

Claim 20 recites *inter alia*: performing recognition functions on the scanned document data to generate a recognized version of the document, defining a subsection delimiter, wherein defining the subsection delimiter comprises marking a paper version of the document of at least one predetermined machine-readable demarcation symbol prior to scanning the document and searching the recognized version for occurrences of items that correspond to the defined subsection delimiter.

The Office Action does not even assert that Sotomayer and/or Gillings disclose performing recognition functions on scanned document data. Additionally, the explanation of the rejection of **claim 20** does not even assert that Sotomayer and Gillings disclose or suggest defining a subsection delimiter, wherein defining the subsection delimiter comprises marking a paper version of the document with at least one predetermined machine-readable demarcation symbol prior to scanning the document. Additionally, it is respectfully submitted that the assertions of the Response to Arguments section with regard to this subject matter are incorrect. Sotomayor does not disclose or suggest marking a paper version of the document. Gillings does not disclose or suggest marking a paper version of a document with at least one predetermined machine-readable demarcation symbol prior to scanning the document. Accordingly, the combination of Sotomayor and Gillings cannot disclose or suggest this subject matter.

For at least the foregoing reasons, the Office has not met its burden for presenting a *prima facie* case of obviousness, and **claim 20** is not anticipated and is not obvious in light of Sotomayer and Gillings.

Claim 21 depends from **claim 2** and is not anticipated and is not obvious for at least that reason.

Independent **claim 22** recites determining a subsection delimiter definition including at least one delimiter characteristic, wherein determining the subsection delimiter comprises a user indicating at least one of a font size and a font style.

It is respectfully submitted that the Office Action does not even assert that Sotomayer and Gillings disclose or suggest determining a subsection delimiter

comprises a user indicating at least one of a font size and a font style.

For at least the foregoing reasons, independent **claim 22**, as well as **claim 24**, which depends therefrom, is not anticipated and is not obvious in light of Sotomayer and Gillings.

Independent **claim 23** recites *inter alia*: determining a subsection delimiter definition including at least one delimiter characteristic, wherein determining a subsection delimiter comprises a user indicating at least one of a font size, a font style and a specific point coordinate within the document.

It is respectfully submitted that the Office Action does not even assert that Sotomayer and Gillings disclose or suggest determining a subsection delimiter comprises a user indicating at least one of a font size, a font style and a specific point coordinate within the document.

For at least the foregoing reasons, the Office Action has not met its burden of presenting a *prima facie* case of obviousness, and independent **claim 23**, as well as **claim 25**, which depends therefrom, is not anticipated and is not obvious in light of Sotomayer and Gillings.

Claims 26 and **27** depend from **claim 10** and are not anticipated and are not obvious for at least that reason.

Additionally, **claim 27** recites: the delimiter designator is operative to accept an indication of at least one of a font size, a font style, a predetermined machine-readable symbol and a specific point coordinate within the document as a delimiter designation. **Claim 26** recites only the font size and font style as delimiter designations.

It is respectfully submitted that the Office Action does not even assert that Sotomayer and Gillings disclose or suggest a delimiter designator that is operative to accept as an indication of at least one of a font size, a font style and a specific point coordinate within a document as a delimiter designation. Additionally, even if the tokens of Sotomayer are fairly construed as predetermined machine-readable symbols, Sotomayer and Gillings do not disclose or suggest a delimiter designator that is operative to accept an indication of a token as a delimiter designation. Accordingly, Sotomayer and Gillings do not disclose or suggest a delimiter designator that is operative to accept an indication of a predetermined machine-readable symbol as a

delimiter designation.

For at least the foregoing reasons, the Office has not met its burden of presenting a *prima facie* case of obviousness and **claims 26** and **27** are not anticipated and are not obvious in view of Sotomayer and Gillings.

Claim 28 has been amended to correct a typographical error that occurred in the previous amendment and recites *inter alia*: performing recognition functions on scanned document data to generate a recognized version of the document and defining a subsection delimiter wherein defining the subsection delimiter comprises at least one of a user building a subsection delimiter from a list of predetermined potential subsection components, performing statistical analysis on recognized characters to select characteristics that are most likely to be associated with subsection delimiters, a user entering a subsection delimiter by selecting symbols on a display portion of the electronic version of the document and designating at least one demarcation point on at least one displayed portion of the electronic document to create a list of demarcation points to be used as a set of delimiter definitions.

It is respectfully submitted that the Office Action does not even assert that Sotomayer and/or Gillings disclose these elements of **claim 28**. Accordingly, it is respectfully submitted that the Office has not met its burden of presenting a *prima facie* case of obviousness with regard to **claim 28**, and **claim 28** is not anticipated and is not obvious in light of Sotomayer and Gillings.

Claim 6 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sotomayor and Gillings in view of Kuga. However, **claim 6** depends from **claim 2** and is patentably distinct and not obvious for at least that reason.

Claims 15 and **16** were rejected under 35 U.S.C. §103(a) as being unpatentable over Sotomayor, Gillings and Schmidt. **Claim 17** was rejected under 35 U.S.C. §103(a) as being unpatentable over Sotomayor, Gillings, Schmidt and Herregods. However, **claim 15** depends from **claim 10**. **Claims 16** and **17** depend from **claim 15**. Therefore, **claims 15**, **16** and **17** depend from **claim 10** and are not anticipated and are not obvious in view of Sotomayor, Gillings, Schmidt and Herregods for at least that reason.

Telephone Interview

In the interests of advancing this application to issue the Applicant respectfully requests that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

CONCLUSION

Claims 2, 4-8, 10-13, 15-18 and 20-28 remain in the application. For at least the foregoing reasons, the application is in condition for allowance. Accordingly, an early indication thereof is respectfully requested.

Respectfully submitted,

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